1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

136 I have mentioned that the Choroti do not possess any water-craft, so
481 that when fishing with nets they often have to wade or swim. In doing
292 this, they expose themselves to being attacked by palometa fishes. As a protection for their legs in wading, the Indians occasionally wear a kind of mail stockings of caraguatá (see p. 54), but when they are swimming, they often get badly mauled by these fierce fishes, and I saw several Choroti with enormous scars from the bites of palometas (fig. 53). It also happens, now and again, that Indians, whem swimming, get killed by caymans, which, here and there, are plentiful.

[286 824]

Fig. 118. Mesh-spacer of palo santo (Bulnesia sarmienti). Length 14.0 cm, width 3.0 cm; thickness along longitudinal axis 0.6 cm. The thickness decreases towards the longer edges, which are rounded. Choroti. Gran Chaco. Bolivia. Riksm. 03. 3. 242.

222 In the collection of the fruits, roots and pith of wild plants the Choroti possess an important source of subsistence. The Chaco Indians obtain edible fruits from, inter alia, the algaroba (Prosopis alba), the chañar (Gourliea decortitans), the mistol (Zizyphus mistol) and the tusca (Acacia aroma). The rootstocks of the caraguatá, or chahuar (Bromelia serra), plant are used for food by these Indians, and the same applies to the pith of the fan palm (Copernicia australis). For pulling down within reach the fruit-bearing branches of trees, the Indians make use of wooden hooks with a short arm and a long one, the latter then serving as a handle, whilst the tree branch which is to be bent down, is hooked with the shorter arm of the implement.[1] In digging up the spiny caraguatá plants the Choroti use a forked stick.[2]

[227]

Fig. 119. Fishing hook of iron, with line of caraguatá fibre. Choroti. Gran Chaco. Bolivia. 1/1. Riksm. 03. 3. 238.

Fig. 120. Fish club of palo santo (Handle upwards). Choroti. Gran Chaco. Bolivia. 1/4. Riksm. 03. 3. 87.

241

At the time of my stay among the Choroti, the part of the tribe with whom I was in touch carried on no other agriculture than the growing of pumpkins in a primi-

[1] Nordenskiöld (11), fig. 3.
[2] Nordenskiöld (13), fig. 49.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6
Toba 5112

tive fashion, and, according to Nordenskiöld and Karsten, such agriculture as the Choroti engage in, is still on a very inconsiderable scale. Nowadays, however, these Indians cultivate — although not to any great extent — the following plants, viz.: pumpkins, cucumbers, water melons, maize, beans, manioc, sweet potatoes, tobacco and cotton.[1] Their only agricultural implements consist of digging-sticks of hard, heavy wood, and a kind of paddle-like, wooden spades. A typical digging-stick is reproduced in fig. 27.

It is probable that the Choroti originally had no other domestic animals than dogs, and the only tame animals I personally saw among this tribe were dogs and fowls. Those of the Choroti Indians who are living in the neighbourhood of the Pilcomayo possess, beside the animals mentioned, also sheep, goats, cattle, horses and cats. Sheep-rearing has now come to be of great importance to the Indians, who use the wool as material for mantles, fillets, etc.

Fig. 121. Cord on which fish are strung by means of a large needle of hard, heavy wood. This kind of carrying-gear is very common among the Choroti. The specimen here reproduced originates, however, from the Toba (neighbours of the Choroti). Gran Chaco. Bolivia. $^{8}/_{9}$. Riksm. 03. 3. 766.

As mentioned, the Choroti are a nomadic people. Their changes of location may be due to various circumstances. When pasture is exhausted in one place, they must look about for another; they move on to more profitable fishing-waters, or wander into regions that are rich in game and wild, edible plants. But there may also be other, and quite different, reasons for the Choroti's leaving their old abodes. In epidemics, when deaths are plentiful, it happens that the Choroti abandon their villages, and this they may also occasionally do if they are apprehensive of visits from whites (see pp. 47 and 48). In a first-rate monograph, Dr. Ragnar Numelin has exhaustively analyzed the causes governing the nomadic instinct in primitive peoples. As re-

[1] Nordenskiöld (11), p. 29.

2: Nordenskiöld E-5 (1908-1909)1919
SK6 Choroti SK6
Ashluslay SK5

V.

Cultivated Plants and Agricultural Tools.

A C 241

The Choroti grow small quantities of Indian corn, manioc, zapallo[1]) water-melon, tobacco, cotton, beans,[2]) calabashes, and sweet potatoes. The tilling of the Ashluslay Indians is more considerable than that of the Choroti. Thus, I have seen among them large manioc plantations. The water-melon, which did not exist in America at the time of the Discovery, reached the Choroti and Ashluslay from the whites. The Choroti call it «santia», from the Spanish «sandía».

A C 174

Manioc and probably tobacco, too, must have reached the Chaco from the north or the east. Where the Choroti and Ashluslay got the other cultivated plants from, i. e. whether they obtained them from the Bronze Age culture of the west, or not, is a question I do not venture to decide. In all probability they are not very old in the Chaco, for the Choroti and the Ashluslay are but too evidently tribes which are predominantly gatherers of wild fruits and fishermen to have practised agriculture for a long period of time. The peaceful Arawaks must have been largely instrumental in spreading the knowledge of agriculture in the Chaco. AZARA[3]) writes of the Guaná[4]): «Rozan para sembrar tabaco, algodón, mandioca, batatas. . . de que viven y no de la caza ni pesca.»

---

[1]) Cucurbita.
[2]) In several varieties.
[3]) (2) p. 384.
[4]) Chané.

2: Nordenskiöld E-5 (1908-1909) 1919
SK6 Choroti SK6
Ashluslay SK5

A
C
241

The agricultural tools of the Choroti and Ashluslay Indians, like those of all the S. American Indians, are very simple. They have sticks and spades, and the Ashluslay have also a kind of club with which they break up clods. Of these tools the stick has a very wide distribution throughout the S. American continent wherever the Indians have any civilization. It is certainly as old in the Chaco as agriculture itself. I cannot therefore say that the Chaco Indians have taken it from anywhere. The spade, on the other hand, is probably a cultural element that reached the Indians of the Chaco from the mountain civilization. This is clearly seen from its geographical distribution. (Map. I). The spade of the Chaco Indians is sometimes made of one piece, the blade being occasionally bound to the handle. Both blade and handle are always of wood, generally of lignum vitae (palo santo).

The spades made in one piece have the shape of a canoe paddle (Fig. 1) with a little handle at the top. The Chiriguano also have a handle to their spades. The spades that have been found in N. Argentina and on the coast of Peru, have as a rule very long blades, like the spades of the Chaco Indians, but no handle. That the Indians of the Chaco should have learnt the use of the spade from the whites, is not probable. Nor is it likelythat, as I have elsewhere assumed, the are copied from paddles[1]).

Fig. 1 Wooden spade. Ashluslay, R. M. (A .1816).

[1]) I will return to this point, in consequence of MAX SCHMIDT's recently publishe l article in Z. f. E. 1918, p. 12. He shows that, besides among the tribes mentioned above, the spade occurs among the Kadiuéo, Bororó,

2: Nordenskiöld E-5 (1908-1909)1919
SK6 Choroti SK6
Ashluslay SK5

A 241 Clubs for breaking up clods are known to me, besides from the Ashluslay, only from the Aymara[1]).

The hoe with a haft bent at an angle, which is so typical of the mountain civilization, was not seen by me in the Chaco, or among the other tribes I visited east of the Andes.

A C 241 For removing the seeds from corn-cobs the Choroti and the Ashluslay use a little tool (Fig. 2) which I have only seen elsewhere among the Chiriguano and the Chané. From books I only know anything similar from the Ijca[2]) in Colombia.

[1]) British Museum. Handbook, p. 280. These have stone heads, while those from the Ashluslay are entirely of wood.

[2]) BOLINDER (4), p. 74.

Fig. 2. Tool of wood and leather for removing the seeds from corn-cobs. Choroti. G. M. D. (1318) 1/2.

Mataco SI7
Choroti SK6

M /320 cont./

771 They have a vague idea of superior beings, whom they fear
776 without worshiping them; the cleverest one becomes the sorcerer
756 and exploits the poverty of his companions, especially today when
648 they are earning money from the whites, to whom they lend im-
464 portant services.

M They frequently move from the region that they occupy to
167 the Argentine Republic; they work, dress, learn some Spanish
177 and a slight smattering of civilization, and return to their lands to live as before.

Choroti.

Ci They zone located southeast of Toba territory is occupied
131 by the Choroti Indians, who have their own language. They
197 occupy the geographic degree 22° 30' latitude and 64° 10' longitude, on the left bank of the Pilcomayo River.

Ci They are quite numerous and peaceful, and they are not
181 treacherous like their neighbors, the Toba. Nevertheless, they
648 inspire respect in all the neighboring tribes; if a mission were to be established at said degree, the conquest of all the Bolivian territory /321/ up to 24° would be accomplished without the need of so many small forts, which are such a great expense to the Nation and which do not create centers of trade and civilization.

Ci Father Gianelli in years past visited the Choroti Indians,
797 was received with displays of affection and appreciation, and
177 found among them good inclinations toward becoming civilized, but at that time the harvest was too much for so few evangelical workers.

Ci The Choroti are not so lazy and savage as the other tribes;
181 they devote themselves to the cultivation of a few seeds and to
241 the raising of cattle, although on a small scale. They are also
231 hunters, however, and when they occupy the banks of the
224 Pilcomayo, they take advantage of the fruits the river brings them, especially in the great floods.